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using bracketing and underlining is attached hereto, and is captioned "Version with Markings to Show Changes Made."

1. (Amended) A system for preparing a lighting sequence, comprising:  
a display interface adapted to display first information representative of a plurality of lighting effects; and  
a processor coupled to the display interface and supporting a sequence authoring interface adapted to permit a user to select at least one lighting effect and at least one lighting unit to execute the at least one selected lighting effect, based on the displayed first information.

2. (Amended) The system of claim 1, wherein:  
the sequence authoring interface is adapted to receive second information representative of an arrangement of a plurality of lighting units, and  
the display interface is adapted to visually display a first representation of the arrangement of the plurality of lighting units based on the received second information.

3. (Amended) The system of claim 2, wherein the display interface is adapted to display a second representation of the at least one selected lighting effect, based on the first representation of the arrangement of the plurality of lighting units, upon execution of the lighting sequence.

4. (Amended) The system of claim 1, wherein the at least one lighting unit is one of a plurality of lighting units, wherein each lighting unit of the plurality of lighting units is associated with a unique address, and wherein the sequence authoring interface is adapted to permit the user to select an address of the at least one lighting unit.

5. (Amended) The system of claim 1, wherein the at least one lighting unit includes at least one LED lighting unit capable of emitting light of any of a range of different colors, and wherein the sequence authoring interface is adapted to permit the user to select at least one color of the light emitted by the at least one LED lighting unit.

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6. (Amended) The system of claim 1, wherein the display interface is adapted to display a grid, wherein the at least one lighting unit is represented along one axis of the grid, and wherein time is represented along a second axis of the grid.

7. (Amended) The system of claim 6, wherein the display interface is adapted to visually represent the at least one selected lighting effect on a region of the grid defined by the at least one lighting unit.

8. (Amended) The system of claim 1, wherein the sequence authoring interface is adapted to store user selections on at least one storage medium.

9. (Amended) The system of claim 1, wherein the sequence authoring interface is adapted to permit the user to select at least one color for the at least one selected lighting effect.

10. (Amended) The system of claim 1, wherein the sequence authoring interface is adapted to permit the user to select a starting color and an ending color for the at least one selected lighting effect.

11. (Amended) The system of claim 1, wherein the sequence authoring interface is adapted to permit the user to select a transition effect for a transition between a first lighting effect and a second lighting effect.

12. (Amended) The system of claim 1, wherein the sequence authoring interface is adapted to permit the user to specify a priority for a first lighting effect which shares a temporal overlap with a second lighting effect.

13. (Amended) The system of claim 1, wherein the sequence authoring interface is adapted to permit the user to specify a brightness for the at least one selected lighting effect.

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14. (Amended) The system of claim 1, wherein the sequence authoring interface is adapted to permit the user to provide instructions to execute and optionally alter the at least one selected lighting effect based upon at least one external stimulus.

15. (Amended) The system of claim 1, wherein the sequence authoring interface is adapted to permit the user to specify a motion of the at least one selected lighting unit.

16. (Amended) The system of claim 1, wherein the sequence authoring interface is adapted to permit the user to design at least one user-composed lighting effect, and wherein the display interface is adapted to display information representative of the at least one user-composed lighting effect.

17. (Amended) A method for preparing a lighting sequence capable of being executed by a controller, comprising acts of:

displaying first information representative of a plurality of lighting effects;  
style="padding-left: 40px;">selecting at least one lighting effect for the lighting sequence, based on the displayed first information; and  
style="padding-left: 40px;">selecting at least one lighting unit to execute the at least one selected lighting effect.

18. (Amended) The method of claim 17, further comprising acts of:

receiving second information representative of an arrangement of a plurality of lighting units, and  
style="padding-left: 40px;">displaying a first representation of the arrangement of the plurality of lighting units based on the received second information.

19. (Amended) The method of claim 18, further comprising an act of visually representing the at least one selected lighting effect, based on the first representation of the arrangement of the plurality of lighting units, upon execution of the lighting sequence.

20. (Amended) The method of claim 17, further comprising an act of:

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selecting a second lighting unit; and

selecting one of the at least one selected lighting effect and another lighting effect for execution by the second lighting unit.

21. (Amended) The method of claim 17, further comprising an act of displaying a grid, wherein the at least one lighting unit is represented along one axis of the grid and wherein time is represented along a second axis of the grid.

22. (Amended) The method of claim 21, further comprising an act of visually representing the at least one selected lighting effect on a region of the grid defined by the at least one lighting unit.

23. (Amended) The method of claim 22, further comprising an act of storing user selections on at least one storage medium.

24. (Amended) The method of claim 17, further comprising an act of selecting at least one color for the at least one selected lighting effect.

25. (Amended) The method of claim 17, wherein the at least one selected lighting effect includes a first lighting effect associated with the at least one lighting unit, and wherein the method further comprises acts of:

selecting a second lighting effect for the lighting sequence, based on the displayed first information.

26. (Amended) The method of claim 25, further comprising an act of selecting a transition effect between the first lighting effect and the second lighting effect.

27. (Amended) The method of claim 25, further comprising an act of determining a priority for multiple selected lighting effects.

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28. (Amended) The method of claim 17, further comprising an act of specifying a brightness for the at least one selected lighting effect.

29. (Amended) The method of claim 17, wherein the act of selecting at least one lighting unit to execute the at least one selected lighting effect includes an act of selecting a plurality of lighting units to execute the at least one selected lighting effect.

30. (Amended) The method of claim 17, wherein the act of selecting at least one lighting unit to execute the at least one selected lighting effect includes an act of selecting at least one LED lighting unit capable of emitting light of any of a range of colors.

31. (Amended) The method of claim 17, further comprising an act of providing instructions to execute and optionally alter the at least one selected lighting effect based upon at least one external stimulus.

32. (Amended) The method of claim 17, wherein the act of selecting at least one lighting unit includes an act of selecting an address of the at least one lighting unit.

33. (Amended) The method of claim 17, further comprising an act of specifying a motion of the at least one selected lighting unit.

34. (Amended) An apparatus for controlling at least one lighting unit, comprising:  
a data interface for receiving instructions for controlling the at least one lighting unit;  
a signal interface for receiving at least one external signal;  
a processor for processing said instructions to provide a data stream, the processor being capable of altering the processing of said instructions based on the at least one external signal;  
and  
a data output for transmitting the data stream to the at least one lighting unit.

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35. (Amended) The apparatus of claim 34, in combination with at least one external device coupled to the signal interface to provide the at least one external signal.

36. (Amended) The apparatus of claim 34, wherein said signal interface includes a port for receiving an electromagnetic signal.

37. (Amended) The apparatus of claim 34, wherein said data output includes a port for transmitting data to a mechanical device other than a lighting unit.

38. (Amended) The apparatus of claim 34, wherein said data output includes a port for transmitting data to a device for reproducing an audio signal.

39. (Amended) The apparatus of claim 34, wherein said data output includes a port for transmitting data to a device for reproducing a video image.

40. (Amended) The apparatus of claim 34, wherein said data interface is a data connection for receiving the instructions from another processor.

41. (Amended) The apparatus of claim 40, wherein said data connection comprises one of an infrared port, a serial port, a parallel port, an RF port, a wireless port and a USB port.

42. (Amended) The apparatus of claim 34, wherein said data interface is capable of reading the instructions from a second storage medium.

43. (Amended) The apparatus of claim 42, wherein said at least one storage medium and said second storage medium each is selected from one of a magnetic disk, magnetic tape, a smart card, volatile solid state memory, non-volatile solid state memory and a compact disk.

44. (Amended) The apparatus of claim 34, further comprising:

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a database to store directions for converting predetermined lighting effects having parameters associated therewith into data suitable for controlling the at least one lighting unit.

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45. (Amended) The apparatus of claim 34, further comprising:  
a memory module for storing information representative of effects being executed by the at least one lighting unit.
46. (Amended) The apparatus of claim 34, further comprising:  
a timing mechanism for measuring intervals of time.
47. (Amended) The apparatus of claim 34, further comprising:  
a first timing mechanism for measuring elapsed time; and  
a second timing mechanism for determining the date and time of day.
48. (Amended) The apparatus of claim 34, wherein the at least one lighting unit includes at least one LED lighting unit capable of emitting light of any of a range of colors, and wherein the processor is adapted to set a color of the at least one LED lighting unit.
49. (Amended) A method for controlling at least one lighting unit, comprising acts of:  
receiving instructions for controlling the at least one lighting unit;  
monitoring at least one input for at least one external signal;  
processing said instructions to provide a data stream;  
altering the processing of said instructions based on the at least one external signal; and  
transmitting the data stream to the at least one lighting unit.
50. (Amended) The method of claim 49, wherein the act of monitoring at least one input includes an act of monitoring at least one user interface for the at least one external signal.
51. (Amended) The method of claim 49, wherein the act of monitoring at least one input includes an act of monitoring the at least one input for an electromagnetic signal.

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52. (Amended) The method of claim 49, wherein the act of transmitting the data stream includes an act of transmitting data to a mechanical device other than a lighting unit.

53. (Amended) The method of claim 49, wherein the act of transmitting the data stream includes an act of transmitting data to a device for reproducing an audio signal.

54. (Amended) The method of claim 49, wherein the act of transmitting the data stream includes an act of transmitting data to a device for reproducing a video image.

55. (Amended) The method of claim 49, wherein the act of receiving instructions includes an act of receiving the instructions from another processor.

56. (Amended) The method of claim 49, wherein the act of receiving instructions includes an act of receiving the instructions via an infrared port, a serial port, a parallel port, or a USB port.

57. (Amended) The method of claim 49, wherein the act of receiving instructions includes an act of reading the instructions from a storage medium.

58. (Amended) The method of claim 57, wherein the act of reading the instructions from a storage medium includes an act of reading data from one of a magnetic disk, magnetic tape, a smart card, and a compact disk.

59. (Amended) The method of claim 49, wherein the act of receiving instructions includes an act of receiving a plurality of lighting effects having parameters associated therewith.

60. (Amended) The method of claim 59, further comprising an act of:  
utilizing directions for converting predetermined lighting effects to convert said plurality of lighting effects into data suitable for controlling the at least one lighting unit.

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61. (Amended) The method of claim 49, further comprising an act of:  
storing information representative of effects being executed by the at least one lighting  
unit in a transient memory.

62. (Amended) The method of claim 49, wherein the act of monitoring at least one input  
includes an act of monitoring a timing mechanism for the at least one external signal.

63. (Amended) The method of claim 49, wherein the act of monitoring at least one input  
includes an act of monitoring a first timing mechanism for measuring elapsed time, and a second  
timing mechanism for determining the date and time of day.

64. (Amended) The method of claim 49, wherein the act of monitoring at least one input  
includes an act of monitoring a sensor for the at least one external signal.

65. (Amended) The method of claim 49, wherein the act of monitoring at least one input  
includes an act of receiving an alarm signal.

66. (Amended) The method of claim 49, wherein the act of transmitting the data stream  
includes an act of setting a color of an LED lighting unit capable of emitting light of any of a  
range of colors.

67. (Amended) The method of claim 49, wherein the act of altering the processing of the  
instructions based on the at least one external signal includes an act of repeating an effect until  
the at least one external signal is received.

68. (Amended) The method of claim 49, wherein the act of altering the processing of the  
instructions based on the at least one external signal includes an act of modifying a rate of a  
lighting sequence.

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69. (Amended) The method of claim 49, wherein the act of altering the processing of the instructions based on the at least one external signal includes an act of switching from a high priority effect to a low priority effect.

70. (Amended) The method of claim 49, wherein the act of altering the processing of the instructions based on the at least one external signal includes an act of interrupting a lighting sequence to execute a different effect.

71. (Amended) The method of claim 49, wherein:

the act of receiving instructions includes an act of receiving a primary lighting effect and a secondary lighting effect, the secondary lighting effect designated to be executed instead of the primary lighting effect upon a predetermined condition;

the act of processing the instructions includes an act of providing the data stream such that the at least one lighting unit executes the primary lighting effect;

the act of monitoring at least one input includes an act of receiving a signal indicative of the predetermined condition; and

the act of altering the processing of the instructions includes an act of providing the data stream such that the at least one lighting unit executes the secondary lighting effect.

72. (Amended) The method of claim 49, wherein:

the act of receiving instructions includes an act of receiving instructions for executing at least one sequence of lighting effects;

the act of transmitting the data stream includes an act of executing the at least one sequence of lighting effects utilizing the at least one lighting unit; and

the act of altering the processing of the instructions includes an act of altering the execution of the at least one sequence of lighting effects.

73. (Amended) The method of claim 72, wherein the act of altering the execution of the at least one sequence of lighting effects includes an act of altering a rate of the at least one sequence.

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74. (Amended) The method of claim 72, wherein:

the act of receiving instructions includes an act of receiving instructions for executing at least two sequences of lighting effects;

the act of transmitting the data stream includes an act of executing a first sequence of the at least two sequences of lighting effects utilizing the at least one lighting unit; and

the act of altering the execution of the at least one sequence of lighting effects includes an act of executing a different sequence of the at least two sequences of lighting effects.

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75. (Amended) The method of claim 72, wherein the act of altering the execution of the at least one sequence of lighting effects includes an act of pausing during the at least one sequence.

76. (Amended) The method of claim 72, wherein the act of altering the execution of the at least one sequence of lighting effects includes an act of changing a brightness of light emitted by the at least one lighting unit.

77. (Amended) The method of claim 72, wherein the act of altering the execution of the at least one sequence of lighting effects includes an act of changing a color of light emitted by the at least one lighting unit.

*Please add new claims 78-106 as follows:*

78. (New) The system of claim 1, wherein the sequence authoring interface is adapted to permit the user to select a start time for the at least one selected lighting effect and a stop time for the at least one selected lighting effect.

*AS*

79. (New) The system of claim 1, further comprising a controller coupled to the processor and adapted to execute the lighting sequence so as to control the at least one lighting unit.

80. (New) The system of claim 79, wherein the controller includes at least one storage

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medium to store the lighting sequence in a data format that represents a data stream capable of directly controlling the at least one lighting unit.

81. (New) The system of claim 79, in combination with the at least one lighting unit, wherein the at least one lighting unit is coupled to the controller.

82. (New) The combination of claim 81, wherein the at least one lighting unit includes at least one LED lighting unit capable of emitting light of any of a range of different colors.

83. (New) A system for preparing and executing at least one lighting sequence, comprising:  
a display interface adapted to display information representative of a plurality of lighting effects;

    a processor coupled to the display interface and supporting a sequence authoring interface adapted to permit a user to select at least one lighting effect and at least one lighting unit to execute the at least one selected lighting effect, based on the displayed information; and

    a controller coupled to the processor and adapted to execute the lighting sequence so as to control the at least one lighting unit.

84. (New) The system of claim 83, wherein the controller is disposed within the processor.

85. (New) The system of claim 83, wherein the controller is a separate unit from the processor.

86. (New) The system of claim 83, in combination with the at least one lighting unit.

87. (New) The method of claim 17, further comprising acts of:  
selecting a start time for the at least one selected lighting effect; and  
selecting a stop time for the at least one selected lighting effect.

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88. (New) The method of claim 17, further comprising an act of executing the lighting sequence so as to control the at least one lighting unit.

89. (New) The method of claim 17, further comprising an act of storing the lighting sequence in a data format that represents a data stream capable of directly controlling the at least one lighting unit.

90. (New) At least one computer readable medium encoded with at least one program that, when executed, performs the method of claim 17.

91. (New) At least one computer readable medium encoded with at least one program that, when executed, performs the method of claim 21.

92. (New) A method for preparing and executing at least one lighting sequence, comprising acts of:

- displaying information representative of a plurality of lighting effects;
- selecting at least one lighting effect for the at least one lighting sequence, based on the displayed information;
- selecting at least one lighting unit to execute the at least one selected lighting effect; and
- executing the at least one lighting sequence so as to control the at least one lighting unit.

93. (New) The combination of claim 35, wherein the at least one external device includes at least one of a user interface, a sensor, a timing device, a music synchronization device, and a sound level detection device.

94. (New) The combination of claim 93, wherein the at least one external device includes at least one user interface, and wherein the at least one user interface includes at least one of:

- at least one switch;
- at least one button;
- at least one dial;

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at least one slider;  
at least one console; and  
at least one keyboard.

95. The combination of claim 94, wherein the instructions received at the data interface include at least one lighting sequence, and wherein the processor is adapted to change at least one of:

at least one lighting effect in the at least one lighting sequence;  
at least one parameter of at least one lighting effect in the at least one lighting sequence;  
a priority amongst at least two different lighting effects in the at least one lighting sequence;  
an execution speed of the at least one lighting sequence;  
a brightness of light emitted by the at least one lighting unit; and  
a color of light emitted by the at least one lighting unit,  
based on the at least one external signal provided by the at least one user interface.

96. The combination of claim 94, wherein the instructions received at the data interface include at least two different lighting sequences, and wherein the processor is adapted to selectively execute one lighting sequence of the at least two different lighting sequences based on the at least one external signal provided by the at least one user interface.

97. (New) The apparatus of claim 34, wherein the signal interface includes at least one user interface.

98. (New) The apparatus of claim 97, wherein the at least one user interface includes at least one of:

at least one switch;  
at least one button;  
at least one dial;  
at least one slider;

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at least one console; and  
at least one keyboard.

99. The apparatus of claim 98, wherein the instructions received at the data interface include at least one lighting sequence, and wherein the processor is adapted to change at least one of:  
at least one lighting effect in the at least one lighting sequence;  
at least one parameter of at least one lighting effect in the at least one lighting sequence;  
a priority amongst at least two different lighting effects in the at least one lighting sequence;  
an execution speed of the at least one lighting sequence;  
a brightness of light emitted by the at least one lighting unit; and  
a color of light emitted by the at least one lighting unit,  
based on the at least one external signal provided by the at least one user interface.

100. The apparatus of claim 98, wherein the instructions received at the data interface include at least two different lighting sequences, and wherein the processor is adapted to selectively execute one lighting sequence of the at least two different lighting sequences  
based on the at least one external signal provided by the at least one user interface.

101. (New) The apparatus of claim 34, wherein the instructions received at the data interface include at least one lighting sequence, and wherein the processor is adapted to change at least one of:  
at least one lighting effect in the at least one lighting sequence;  
at least one parameter of at least one lighting effect in the at least one lighting sequence;  
a priority amongst at least two different lighting effects in the at least one lighting sequence;  
an execution speed of the at least one lighting sequence;  
a brightness of light emitted by the at least one lighting unit; and  
a color of light emitted by the at least one lighting unit,  
based on the at least one external signal.

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102. The apparatus of claim 34, wherein the instructions received at the data interface include at least two different lighting sequences, and wherein the processor is adapted to selectively execute one lighting sequence of the at least two different lighting sequences based on the at least one external signal.

103. (New) The apparatus of claim 34, in combination with the at least one lighting unit.

104. (New) The method of claim 49, wherein the act of monitoring at least one input includes an act of monitoring at least one external device for the at least one external signal.

105. (New) The method of claim 104, wherein the act of monitoring at least one external device includes an act of monitoring at least one user interface for the at least one external signal.

106. (New) At least one computer readable medium encoded with at least one program that, when executed, performs the method of claim 49.

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